

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

LISTING OF CLAIMS

1. (currently amended) Oxygen nanobubble water comprising an aqueous solution having multiple oxygen nanobubbles therein, each of said oxygen nanobubbles: containing oxygen, having a bubble diameter of 200 nm or less bubble size distribution with a peak of about 150 nm, and being surrounded by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution, wherein the oxygen nanobubble water has a stable structure such that if the oxygen nanobubble water is placed in a glass bottle and is stored in a cool, dark place the bubble size distribution will be maintained for at least one month.
2. (currently amended) Oxygen nanobubble water comprising an aqueous solution having multiple oxygen nanobubbles therein, each of said oxygen nanobubbles: containing oxygen, having a bubble diameter of 200 nm or less bubble size distribution with a peak of about 150 nm, and being surrounded by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution, the aqueous solution having a salinity concentration in the range of 0.01 % to 3.5%, 0.5% to 1.5% such that both seawater and freshwater fish could survive, wherein the oxygen nanobubble water has a stable structure such that if the oxygen nanobubble water is placed in a glass bottle and is stored in a cool, dark place the bubble size distribution will be maintained for at least one month, and wherein the oxygen nanobubble water has a structure enabling the recuperation of weakened fish.
3. (currently amended) A method of producing oxygen nanobubble water, said method comprising:
applying physical irritation to oxygen-containing microbubbles contained in an aqueous solution, each of said microbubbles having a microbubble diameter, to thereby

reduce said microbubble diameter and create a number of oxygen nanobubbles that contain oxygen; and

surrounding each of said oxygen nanobubbles by an inorganic shell comprised predominantly of electrolytic ions positioned to inhibit said oxygen from dissolving into the aqueous solution to a degree that if the oxygen nanobubble water is placed in a glass bottle and is stored in a cool, dark place the bubble size distribution will be maintained for at least one month.

4. (currently amended) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

reducing the microbubbles in size, and when said microbubble diameter [[of]] is reduced to 200 nm or less bubble size distribution with a peak of about 150 nm, a charge density on a surface of the microbubble increases and an electrostatic repulsive force is produced, whereby a size reduction of the microbubble stops.

5. (previously presented) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

reducing the microbubbles in size, due to ions adsorbed on a gas-liquid interface and an electrostatic attraction, both ions in the aqueous solution having opposite charges to each other and attracted to a vicinity of the interface are concentrated in a high concentration so as to serve as a shell surrounding the microbubble and inhibit a dissolution of oxygen within the microbubble into the aqueous solution, whereby the oxygen nanobubble is stabilized.

6. (previously presented) The method of producing oxygen nanobubble water according to claim 3, wherein ions adsorbed on a gas-liquid interface are hydrogen ions and hydroxide ions and electrolytic ions within the aqueous solution used as ions attracted to a vicinity of an interface, whereby the oxygen nanobubble is stabilized.

7. (previously presented) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

reducing the microbubbles in size, a temperature within the microbubble sharply rising by adiabatic compression so that a physicochemical change in association with the temperature is applied around the microbubble, whereby the oxygen nanobubble is stabilized.

8. (cancelled)

9. (cancelled)

10. (original) The method of producing oxygen nanobubble water according to claim 3, wherein the physical irritation is to cause the aqueous solution to flow by driving a rotor mounted in a vessel containing therein the aqueous solution and use compression, expansion and vortex flow which are produced during the flowing.

11. (previously presented) The method of producing oxygen nanobubble water according to claim 3, wherein in the case of having a circulating circuit in the vessel, the physical irritation is to cause compression, expansion and vortex flow of the aqueous solution by passing the solution through an orifice or perforated plate having a single hole or many holes after receiving the aqueous solution in which the microbubbles are contained.

12. (currently amended) The method of producing oxygen nanobubble water according to claim 3, wherein said applying the physical irritation to the microbubbles comprises:

applying the physical irritation to the microbubbles to thereby reduce said microbubble diameter from between 10 and 50 μm to ~~200 nm or less~~ bubble size distribution with a peak of about 150 nm.

13. (previously presented) The method of producing oxygen nanobubble water according to claim 3, said method further comprising:

adding electrolytes to the aqueous solution to enable an electric conductivity of the aqueous solution to reach 300 $\mu\text{S}/\text{cm}$ or more to inhibit a reduction in size of the microbubble diameter.